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IN THE CLAIMS:

1. (Currently amended) A method for megasonic cleaning ~~a substrate~~, comprising ~~the steps of~~:

a) providing a container having sidewalls on all sides of said container, wherein at least two of said sidewalls have an overflow, said container having a container inlet for flowing fluid into said container, said container inlet located below said overflows;

b) providing at least one from the group ~~including~~ consisting of a first megasonic transducer with a first active surface and a first array of megasonic transducers with a first array active surface for providing vibrational energy in said container;

c) providing a substrate having a side that includes a conductive film and disposing ~~a~~ said substrate in said container within said sidewalls[[,]] and below said overflow, wherein said side is facing, ~~and~~ substantially parallel to, and spaced a first spacing from at least one from the group ~~including~~ consisting of said first active surface and said first array active surface;

d) immersing ~~the~~ said substrate in said fluid, flowing said fluid upwardly in said container from said container inlet, through said first spacing, and over said overflows; and

e) applying energy to at least one from the group including said first megasonic transducer and said first array of megasonic transducers to provide vibration in said fluid and to clean the substrate wherein substantially all vibration provided in said fluid is from at least one from the

group ~~including~~ consisting of said first megasonic transducer, said first array of megasonic transducers, a transducer arranged parallel to said first active surface, and a transducer arranged parallel to said first array active surface.

2. (previously presented) A method as recited in claim 1, further comprising providing relative motion between said substrate and said transducer while performing said fluid-flowing and energy-applying.

3. (Currently amended) A method as recited in claim 1, wherein said substrate has a substrate surface area and at least one from the group ~~including~~ consisting of said first active surface and said first array active surface has an area at least equal to 40% of the substrate surface area.

4. (previously presented) A method as recited in claim 1, wherein the substrate has a maximum diameter and said first spacing is in a range from 1% to 80% of said maximum diameter.

5. (previously presented) A method as recited in claim 1, wherein said first spacing is in a range from 1 micrometer to 160 millimeters.

6. (Currently amended) A method as recited in claim 1, wherein ~~said~~ megasonic energy applied to at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers has a frequency of at least 400 kilohertz.

7. (Currently amended) A method as recited in claim 1, wherein ~~said~~ megasonic energy applied to at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers has a maximum power of at least 400 watts.

8. (Currently amended) A method as recited in claim 7, wherein ~~said~~ megasonic energy is applied to at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers with 20% to 100% of said maximum power.

9. (previously presented) A method as recited in claim 1, wherein said first megasonic transducer has an area and a total input power and wherein said input power divided by said area is at least four watts per square centimeter.

10. (previously presented) A method as recited in claim 1, wherein said flowing said fluid upwardly in said container comprises flowing said fluid through said first spacing at a fluid flow rate sufficient to carry particles away from the substrate before they redeposit on the substrate.

11. (previously presented) A method as recited in claim 1, wherein said container has a volume and wherein said flowing said fluid comprises flowing said fluid through said first spacing at a rate to replace said fluid in said volume in less than or equal to one minute.

12. (Currently amended) A method as recited in claim 1, further comprising providing at least one from the group ~~including~~ consisting of a second megasonic transducer with a second active surface and a second array of megasonic transducers with a second array active surface in said tank, wherein at least one from the group ~~including~~ consisting of said second active surface and said second array active surface faces at least one from the group ~~including~~ consisting of said first active surface and said first array active surface, and is substantially parallel to and spaced a second spacing from at least one from the group ~~including~~ consisting of said first active surface and said first array active surface.

13. (Currently amended) A method as recited in claim 12, further comprising completely immersing in said fluid at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers and at least one from the group ~~including~~ consisting of said second megasonic transducer and said second array of megasonic transducers .

14. (Currently amended) A method as recited in claim 12, further comprising disposing the substrate in said container between at least one from the group ~~including~~ consisting of said first active surface and said first array active surface and at least one from the group ~~including~~ consisting of said second active surface and said second array active surface.

15. (previously presented) A method as recited in claim 14, further comprising flowing said fluid through said second spacing.

16. (previously presented) A method as recited in claim 15, further comprising applying energy to said second megasonic transducer.

17. (previously presented) A method as recited in claim 12, wherein said first megasonic transducer and said second megasonic transducer provide energy to clean both sides and edges of the substrate.

18. (previously presented) A method as recited in claim 1, wherein said fluid comprises one of deonized water, dilute RCA cleaning solution and dilute citric acid solution.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (previously presented) A method as recited in claim 1, further comprising completely immersing said first transducer in said fluid.

23. (currently amended) A method for megasonic cleaning a single substrate, comprising ~~the steps of~~:

a) providing a container comprising at least one from the group ~~including~~ consisting of a first megasonic transducer with a first active surface arranged in a horizontal plane and a first array of megasonic transducers with a first array active surface arranged in a horizontal plane, wherein at least one from the group ~~including~~ consisting of said first magasonic transducer and said first array of megasonic transducers is held in a fixed position, and wherein said container has sidewalls on all sides, wherein at least two of said sidewalls have an overflow, wherein said container ~~having~~ has a container inlet for flowing fluid into said container, wherein said container inlet is located below said overflows;

b) providing a single substrate having a side that includes a conductive film and disposing a said single substrate in said container within said sidewalls, below said overflow, wherein said side is facing, ~~and~~ substantially parallel to, and spaced a spacing from at least one from the group consisting of said first active surface ~~or~~ and said first array active surface;

c) immersing ~~the~~ said single substrate in a fluid and flowing said fluid upwardly in said container from said container inlet, through said spacing, and over said overflows; and

d) applying energy to said first megasonic transducer wherein substantially all vibration provided in said fluid is from at least one from the group ~~including~~ consisting of said first megasonic transducer, said first array of megasonic transducers, a transducer arranged parallel to said first active surface and a transducer arranged parallel to said first array active surface.

24-58. (Canceled)

59. (Currently Amended) A method for megasonic cleaning a single substrate, comprising ~~the steps of~~:

(a) providing a container having sidewalls on all sides of said container, wherein at least two of said sidewalls have an overflow, said container having a container inlet for flowing fluid into said container, said container inlet located below said overflows;

(b) providing a first megasonic transducer with at least one from the group ~~including~~ consisting of a first active surface and a first array of megasonic transducers with a first array active surface, wherein at least one from the group ~~including~~ consisting of said first active surface and said first array active surface is arranged in a horizontal plane to provide megasonic vibration in said container;

(c) providing a single substrate having a side that includes a conductive film and disposing ~~a~~ said single substrate in said container within said sidewalls, below said overflow, wherein said side is ~~and~~ facing, substantially parallel to, and spaced a first spacing from at least one from the group ~~including~~ consisting of said first active surface and said first array active surface, wherein said single substrate is within said sidewalls and below said overflows;

(d) providing a fluid in said container, immersing said single substrate in said fluid, and flowing said fluid upwardly in said container from said container inlet, through said first spacing, and over said overflows; and

(e) applying energy to said first megasonic transducer, wherein substantially all vibration provided in said fluid is from at least one from the group ~~including~~ consisting of said first megasonic transducer, said first array of megasonic transducers, a transducer arranged parallel to said first active surface and a transducer arranged parallel to said first array active surface.

60. (previously presented) A method as recited in claim 59, wherein said single substrate has a substrate surface area and said first active surface or said first array active surface has an area at least equal to 40% of the substrate surface area.

61. (previously presented) A method as recited in claim 59, wherein said single substrate has a substrate surface and said first megasonic transducer or said first array of megasonic transducers is larger than said substrate surface.

62. (previously presented) A method as recited in claim 59, wherein the single substrate has a maximum diameter and said first spacing is in a range from 1% to 80% of said maximum diameter.

63. (previously presented) A method as recited in claim 59, wherein said first spacing is in a range from 1 micrometer to 160 millimeters.

64. (Currently amended) A method as recited in claim 59, wherein ~~said~~ megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a frequency of at least 400 kilohertz.

65. (Currently amended) A method as recited in claim 59, wherein ~~said~~ megasonic energy applied to said first megasonic transducer or said first array of megasonic transducers has a maximum power of at least 400 watts.

66. (Currently amended) A method as recited in claim 65, wherein said megasonic energy is applied to at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers with 20% to 100% of said maximum power.

67. (previously presented) A method as recited in claim 59, wherein said first megasonic transducer has an area and a total input power and wherein said input power divided by said transducer area is at least four watts per square centimeter.

68. (previously presented) A method as recited in claim 59, wherein said flowing said fluid comprises flowing said fluid through said first spacing at a fluid flow rate sufficient to carry particles away from the single substrate before they redeposit on the single substrate.

69. (previously presented) A method as recited in claim 59, wherein said container has a volume and wherein said flowing a fluid comprises flowing a fluid through said space between the single substrate and said transducer at a rate to replace the fluid in said volume in less than or equal to one minute.

70. (Currently amended) A method as recited in claim 59, further comprising providing at least one from the group ~~including~~ consisting of a second megasonic transducer with a second active surface and a second array of megasonic transducers with a second array active surface in said tank, wherein at least one from the group ~~including~~ consisting of said second active surface and said second array active surface faces at least one from the group ~~including~~ consisting of said first active surface and said first array active surface, and is substantially parallel to and spaced a second spacing from at least one from the group ~~including~~ consisting of said first active surface and said first array active surface.

71. (Currently amended) A method as recited in claim 70, wherein further comprising completely immersing in said fluid at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers and at least one from the group ~~including~~ consisting of said second megasonic transducer and said second array of megasonic transducers .

72. (Currently amended) A method as recited in claim 70, further comprising disposing the single substrate in said container between at least one from the group ~~including~~ consisting of said first active surface and said first array active surface and at least one from the group ~~including~~ consisting of said second active surface and said second array active surface.

73. (previously presented) A method as recited in claim 72, further comprising flowing said fluid through said second spacing.

74. (previously presented) A method as recited in claim 73, further comprising applying energy to said second megasonic transducer.

75. (previously presented) A method as recited in claim 70, wherein said first megasonic transducer and said second megasonic transducer provide energy to clean both sides and edges of the single substrate.

76. (previously presented) A method as recited in claim 59, wherein said fluid comprises one of deonized water, dilute RCA cleaning solution and dilute citric acid solution.

77. (Currently amended) A method as recited in claim 1, wherein at least one from the group ~~including~~ consisting of said first megasonic transducer and said first array of megasonic transducers is larger than said substrate.

78. (previously presented) A method as recited in claim 23, wherein said first megasonic transducer is larger than said single substrate.

79. Cancel

80. (Currently amended) The method as recited in claim 1, wherein at least one from the group ~~including~~ consisting of said first active surface and said first array active surface is arranged in a horizontal plane.

81. (Withdrawn) The method as recited in claim 1, wherein at least one from the group ~~including~~ consisting of said first active surface and said first array active surface is arranged in a vertical plane.

82.-98 cancel

99. (previously presented) A method as recited in claim 2, wherein said providing relative motion between said substrate and said transducer is in a direction substantially parallel to the substrate.

100. (New) A method as recited in claim 1, wherein said conductive film includes a metallic film.

101. (New) A method as recited in claim 23, wherein said conductive film includes a metallic film.

102. (New) A method as recited in claim 59, wherein said conductive film includes a metallic film.